



Forest Health Protection Pacific Southwest Region



Date: September 7, 2011
File Code: 3420

To: Nancy Grulke, Vernon Thomas

Subject: Temperature Readings Near The Show Plantation, Shasta-Trinity National Forest (FHP Report N11-14)

On Tuesday September 6, 2011, temperature readings were taken at four locations near the Show Plantation (Figure 1). All readings were taken in the full sun. The temperature readings were taken with a VWR scientific thermometer and with a Raytek Raynger MX Infrared Lazar Thermometer (thanks Jianwei!). There were consistent differences in the readings between the two. On the solid road surfaces, this may be because the bottom side of the end bulb of the VWR thermometer rested on the road surface while the upper half was exposed to the air. It may also be that the lazarus thermometer was not properly calibrated. In such situations, I tend to believe the accuracy of the lower tech approach, but you can choose which reading to believe.

In any case, here are the locations and the readings:

1. Black top asphalt road, intersection of Pilgrim Creek Road (FS Road 13) and FS Road 40N12, approx. 1 mile from the Show Plantation (Figure 2)
Time: 2:30pm
GPS Coordinates: N41° 20.054', W121° 59.877'
VWR Thermometer: 46°
Lazar Thermometer: 51.5°
2. Dirt road, intersection of Pilgrim Creek Road (FS Road 13) and FS Road 40N12, approx. 1 mile from the Show Plantation (Figure 3)
Time: 2:45pm
GPS Coordinates: N41° 20.080', W121° 59.835'
VWR Thermometer: 46°
Lazar Thermometer: 52.0°

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3. Dirt Road 40N60Y, adjacent to the Show Plantation (Figure 4)
Time: 3:30pm
GPS Coordinates: N41° 19.519', W121° 59.108'
VWR Thermometer: 47°
Lazar Thermometer: 52.0°
4. Lake McCloud, at Tarantula Gulch Boat Ramp, approx. 12¾ air miles SSW from the Show Plantation (Figure 5)
Time: 5:00pm
GPS Coordinates: N41° 09.340', W122° 05.326'
VWR Thermometer: 20° (temp taken off end of boat dock, 1" into the water)
Lazar Thermometer: 18.5° (lazar reads surface temperature)

If you have any questions, feel free to email or give me a call.

/s/ Pete Angwin

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CC: Phil Cannon, Jianwei Zhang

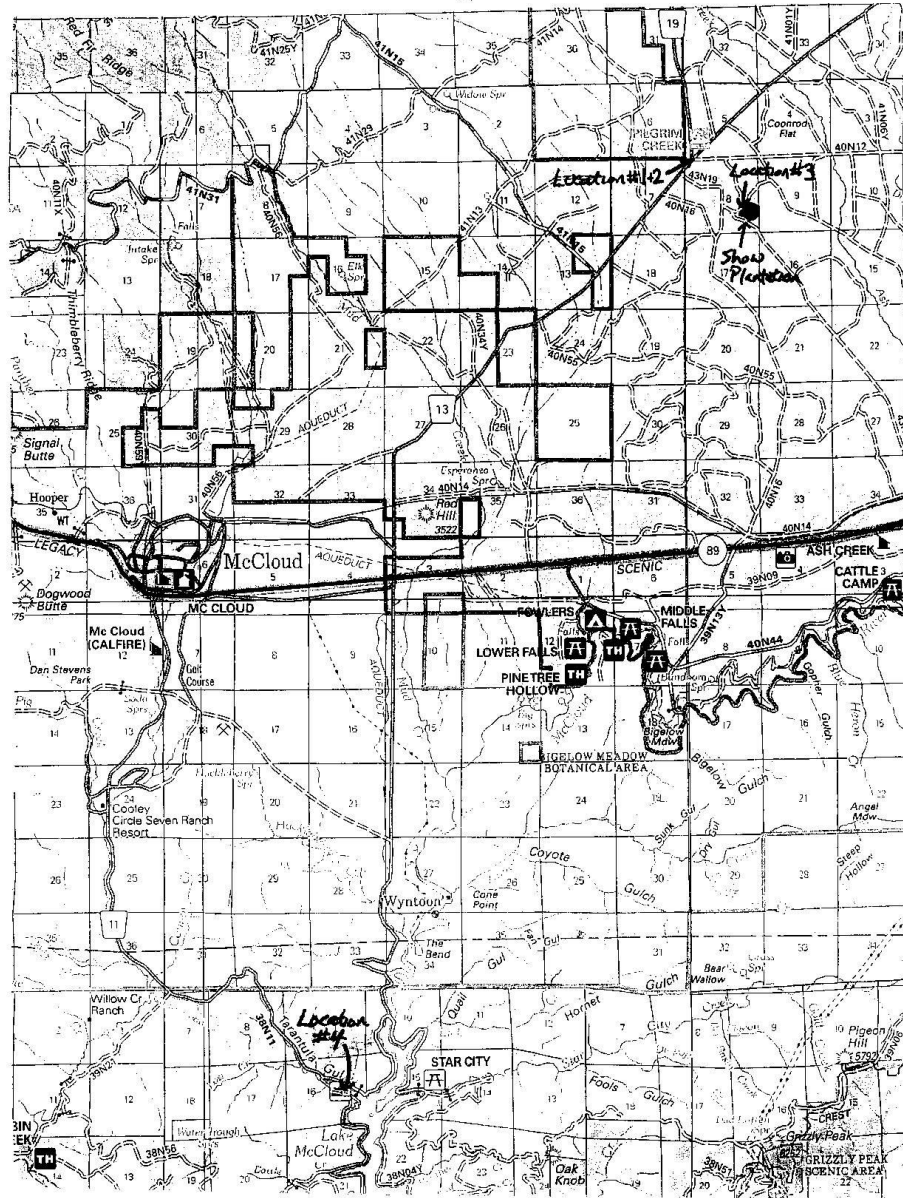


Figure 1. Locations of temperature readings in the vicinity of the Show Plantation.



Figure2. Black top asphalt road, intersection of Pilgrim Creek Road (FS Road 13) and FS Road 40N12, approx. 1 mile from the Show Plantation.



Figure 3. Dirt road, intersection of Pilgrim Creek Road (FS Road 13) and FS Road 40N12, approx. 1 mile from the Show Plantation.



Figure 4. Dirt Road 40N60Y, adjacent to the Show Plantation.



Figure 5. Lake McCloud, at Tarantula Gulch Boat Ramp, approx. 12¾ air miles SSW from the Show Plantation.